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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,160	05/11/2001	Satoru Funakoshi	7372/71158	6913

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FITCH EVEN TABIN AND FLANNERY
120 SOUTH LA SALLE STREET
SUITE 1600
CHICAGO, IL 60603-3406

EXAMINER

NORDMEYER, PATRICIA L

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 07/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/853,160

Applicant(s)

FUNAKOSHI, SATORU

Examiner

Patricia L. Nordmeyer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 3-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. In view of the Appeal Brief filed on May 20, 2004, PROSECUTION IS HEREBY REOPENED. A new non-final rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: #4. Corrected drawing sheets, or amendment to the specification to add the reference character(s) in the description, are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the

examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase “ a base portion and a speaker grille having a plurality of opening holes wherein at least the base portion has a foamed layer and the foamed layer in the base portion has a density ρ of not greater than 0.6 g/cm^3 and an average expansion ratio of the speaker grille is 1 to 1.3 times, wherein the speaker grille is formed in one piece with the base portion from the same material as the base portion so as to be surround by the base portion” in claim 1, is unclear, which renders the claim vague and indefinite. It is unclear from the drawings, specification and claims what the above phrase is saying. Does the complete resin molding have a foamed layer? Is just the base portion foamed? Does the foamed base portion make up part or layer of the speaker grille? Is the base portion a separate element or part that is different from the speaker grille? Is the speaker grille a separate piece that is placed within the base portion to make the resin molding? If the speaker grille has an expansion ratio of 1 to 1.3 times, does this mean that the base portion has a different expansion ratio? What is the 1 to 1.3 times in comparison to, the

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base portion or the material before the whole molding event takes place? If the base portion has a density of 0.6 g/cm^3 , does the speaker grille having a different density? If the speaker grille and the base portion are made from the same material, shouldn't they have same expansion ratio and density? How can they be different if they are the same material? What is meant by "one piece"?

Claim 2 is found to be vague and indefinite due to its dependency upon claim 1, which was rejected above.

Clarification/correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goto et al. in view of Sato et al.

Goto et al. discloses a door trim panel (Figure 7) containing a speaker grille with a plurality of holes (Figure 7, #452). As can be seen in Figures 7 and 8, the resin molding contains a base portion (Figure 8, #30) in which the speaker grille is formed and surrounded by the base

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portion (Figure 7, #452 and 30). The base portion is formed by polypropylene foam (Column 6, lines 28 – 32 and lines 36 – 38).

Goto et al. discloses the claimed device except for the foamed layer in the base portion having a density of not greater than 0.6 g/cm^3 and an average expansion ratio of the speaker grille is 1 to 1.3 times. Sato et al. discloses that it is known in the art to provide a foam layer in a speaker, where the foam is polypropylene having a density between 0.32 to 0.93 g/cm^3 with expansion ratios from 1 to 2.90 (Figure 10). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the polypropylene foam material of Goto et al. with the properties of the polypropylene foam material of Sato et al. in order to give the grille high rigidity while having resistance to water and other environmental factors.

Response to Arguments

7. Applicant's arguments filed May 20, 2004 have been fully considered but they are not persuasive. In light of the new rejection made under 35 U.S.C. 112 2nd paragraph, the Examiner has maintained the 35 U.S.C. 103 rejection over Goto et al. in view of Sato et al. due to the vague and indefinite language of claim 1. Arguments will be responded to below.

In response to Applicant's argument that Goto et al. fails to disclose the features asserted in the Office Action, Goto et al. clearly discloses the presence of polypropylene foam and resin as part of the instrument panel, or base portion, in an automobile in Column 6, lines 28 – 32.

Figure 7, #452 shows a speaker grille has part of the base portion. Even though the

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polypropylene foam is not the only component of the panel of Goto et al., the open language, i.e. comprising, of the claims allows for other materials to be present along with the foam material.

In response to Applicant's arguments that Sato et al. does not suggest the features as asserted in the Office Action, Sato et al. is cited to show that it would be obvious to one skilled to make an article out of polypropylene foam having the desired density and expansion ratios, not to show the presence of a speaker grille. Even though Sato et al. is directed towards a vibrating diaphragm, it is an intended use of polypropylene foam material, and the polypropylene foam material is still used as a speaker grille as shown by Goto et al. above.

8. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both Goto et al. and Sato et al. are directed towards polypropylene foam used to make components of a speaker. Thereby, one of ordinary skill in the art would find it obvious to use the foamed polypropylene to form a layer of Goto et al. and form the speaker grille.

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Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Nordmeyer whose telephone number is (571) 272-1496. The examiner can normally be reached on Mon.-Thurs. from 7:00-4:30 & alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patricia L. Nordmeyer
Examiner
Art Unit 1772

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pln


HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

7/23/04